residence to the Fellows of the Royal College of Surgeons, can vote by papers without the necessity of a journey.

By the Act 24 and 25 Vic., cap. 53, the members of the Universities of Oxford, Cambridge, and Dublin, are empowered to employ voting papers. This privilege was extended to members of the London University by 30 and 31 Vic., cap. 102; and the details of election were further simplified by 31 and 32 Vic., cap. 65. The College of Surgeons having been shown the way, has only to take advantage of the precedent by procuring an Act, of a few lines in length, rehearsing the University Election Acts, and applying their provisions to the particular case of the College of Surgeons before the next election takes place. The question has only to be raised for its propriety to be admitted; for where is the surgeon who would not rather watch a serious case when life or death may depend, than neglect his patient, that he may formally hand over a printed paper to the recognised official of the College of Surgeons? To obtain the desired end, proper means must be taken. The body of country Fellows must ask before their request can be granted; and I shall be glad to receive the names of every Fellow desirous of voting by papers, that we may at once take steps to obtain the Act of Parliament necessary to obtain our just due.

I remain, sir, your obedient servant, ALFRED SMEE.

7, Finsbury Circus, July 6th, 1875.

P.S.—Only fifty-seven country Fellows voted at the last election.

MR. TEALE'S CASE OF EXCESSIVELY HIGH TEMPERATURE.

SIR,—On February 28th, I brought before the members of the Clinical Society, and through them of the profession in general, some notes of a case of excessive and long maintained high temperature after special injuries, with recovery, in which a temperature ranging from 108 to 122 deg. and upwards, had been maintained for a period of nearly nine weeks.

It is not, I think, surprising that the relation of such a case, which, if it be faithfully recorded, tends to upset all the ideas previously entertained as to vital resistance to heat, should have provoked some criticism, and even, in the minds of some, a certain amount of scepticism. From various quarters, I have received suggestions and questions on points of difficulty in the case; and to these I propose, with your permission, to reply *seriatim* in the JOURNAL.

I have been asked, "Was the temperature ever taken in the mouth?"

I was more than once desirous to do so, whilst my patient was very ill. The attempt, however, always caused retching, and was not persevered in. After the paper was read, as Miss G. was then suffering from the relapse brought on by her journey home, I wrote and asked her brother to call in her medical attendant, to ascertain the temperature in her mouth. The brother, in reply, says: "On Sunday, March 7th, my sister's temperature was taken under the tongue, between the thighs, and under the arm (simultaneously), and was from 108 to 108½ deg."

Mr. Henry Hind, partner of the Messrs. Trotter of Stockton, writes on the same date:

"I was asked to see your patient, Miss G., on Sunday, March 7th, and I then found her with a quiet pulse, and apparently in a good state of health, but in bed; and upon taking her temperature, I found the thermometer in use by her to register 108 deg. This I verified by using my own, which registered the same within one-eighth part of a degree. I have now in my possession a thermometer lent by me to Mr. G., which is indexed to mark 110 deg.; and after use, the register was driven into the little bulb at the end."

"Was the temperature ever taken in the rectum, groin, and axilla simultaneously?"

On December 10th, 1874, it was so taken (as was stated in my paper, an abstract of which only appeared in the JOURNAL). The result was: temperature in both axillæ, 110.4 deg.; in rectum, 111 deg. It was repeatedly taken in both axillæ, and between the thighs simultaneously, when, as a rule, the three thermometers were within half a degree of one another."

"Have you ever kept your hand and eye on the instrument whilst any of the high temperatures were recorded?

I have repeatedly steadied the thermometer in the axillæ myself, and have watched them rise simultaneously to heights ranging from 112 to 118 deg. and upwards. The thermometers have then been carefully removed by me into the adjoining room, to avoid drawing our patient's attention unduly to our observations; and I have then frequently given them to the nurses and friends to grasp. The sensation to the hand of a glass tube heated to 118 deg. is one that, when once it has been felt, is not easily forgotten.

"Had you a trained nurse during the period of the high temperature?"

For most of the time; at first, one from the York Institution, and afterwards one from Lincoln. They were both somewhat sceptical about the high temperature at first, having been accustomed to take readings in hospitals; and I put them on their guard against mistakes. They were repeatedly present when observations were taken.

"Had the patient frequently hot bottles in bed with her, or hot flannels?"

To her feet, an India-rubber hot-water bottle was occasionally applied, but nowhere else. To her head and spine, she had very frequently ice-bags, which were grateful to her. I was early made acquainted with the "hot-water-bottle theory", and mentioned it to her nurses and attendants. On this point, I would ask, if a patient could endure in contact with her skin *one* bottle so hot that it would raise a thermometer to 118 or 120 deg., still less two or three in various parts of the body. On removing the instrument, I have repeatedly placed my hand in the axilla, and have found the impression of heat given there as great as that given by the thermometer, the patient's hands being at the same time icy cold.

Observations were taken at all sorts of times, sometimes in the night when the patient was dozing.

During the nine weeks of my patient's severe illness, a variety of instruments (most of which have since received the Kew certificate) registered temperatures which never once fell *below* 108 deg., and which sometimes reached 122 deg. and upwards. For five weeks afterwards, the patient being convalescent, the same instruments never once registered a temperature above 100 deg. After the patient's return home, when she was suffering from a partial relapse of her old symptoms, another set of instruments, in the hands of another medical man, again registered as high as 110 deg. and upwards (the temperature in the mouth tallying with that in the axilla). Since that time, convalescence having again been gradually approached, frequent observations have never on any occasion given a high rate of temperature.

I have now laid before the profession every point that occurs to me as likely to be of interest in this case. I have carefully looked round to see if there can have been any possibility of error, and have failed to find any. I now leave it, with the conviction that, if it has been accurately observed and faithfully recorded, as I believe it has been, other facts must sooner or later crop up, which will tend to throw light on that which is at present obscure.

In the discussion which followed the reading of the paper at the Clinical Society, Mr. Jonathan Hutchinson pointed out that there was an essential difference between the cases of abnormal temperature following lesion of nerve-centres, and those which formed part of the course of a specific fever; and Dr. Farquharson drew attention to a case of excessive lowering of temperature after spinal injury to 81 deg. Again, in the BRITISH MEDICAL JOURNAL of April 3rd, 1875, under the heading "Drunkenness in Germany", an account is given of thermometric observations carefully taken both in rectum and axilla, in two cases of alcohol poisoning, in one of which a temperature of 76 deg. was recorded, and in the other of 75.5 deg., with recovery in both cases. That is to say, a depression of 23 deg.; whilst in my case it was raised to about the same amount.

In pursuance of the same idea, that the greatest variations of temperature may be looked for in injuries to the nervous centres, Mr. Pridgin Teale, on the same occasion, related a case he had recently seen of fracture of the skull, where, in a few hours after the injury, the temperature had risen to 109 deg., when death ensued. Can any one say how high it might not have risen, had not the injuries caused death? For I contend that there is no proof in such cases that the temperature, *per se*, is the cause of death.

Dr. Lionel Beale, in the Lumleian Lectures on Life and on Vital Action in Health and Disease (see BRITISH MEDICAL JOURNAL, May 8th, 1875), in further illustration of the same idea, speaking of bioplasm-particles, says:

"Another important change to which these bioplasm-particles, in connection with the peripheral expansion of nerves, probably takes part, is the development of heat. Is it not possible that, under certain circumstances, the mode of force developed in the matter of the nerve-bioplasm may be changed, heat being rapidly produced instead of nerve-force? The suggestion at once occurs, whether the explanation of such exceptional cases of high temperature as that brought by Mr. John Teale before the Clinical Society a short time since, will not probably be found to have something to do with the phenomena of nerve-bioplasm." I am, sir, faithfully yours, JOHN W. TEALE.

Scarborough, June 20th, 1875.